INSTRUCTION MANUAL

SI 493

POWER SUPPLY

PS-2-1

ATLANTIC RESEARCH

A DIVISION OF THE SUSQUEHANNA CORPORATION

TELEPRODUCTS DEPARTMENT

SHIRLEY HIGHWAY AT EDSALL ROAD
ALEXANDRIA, VIRGINIA 22314

Price: 75¢

SPECIFICATIONS AND INSTRUCTIONS

SI 493

POWER SUPPLY

PS-2-1

Applies to units having serial numbers in the B series.

February 1969

From the TELEPRODUCT® Line
of the
Telecommunication Products Department

Manufactured by
ATLANTIC RESEARCH CORPORATION
Alexandria, Virginia 22314

© The Susquehanna Corporation 1969

GENERAL DESCRIPTION

The Power Supply PS-2-1 is a direct substitution for the battery normally supplied with the portable Distortion Measuring Set DMS-3. The Power Supply fits into the DMS battery holder without mechanical change to allow operation of the instrument from a standard 117-volt ac power source. In addition to its zener regulated -17-volt dc output for operating the DMS solid-state circuits, the PS-2-1 also provides -115 volts dc for lighting neon lamps. Specifications are contained in Table 1-1.

Table 1. Specifications, Power Supply PS-2-1.

Power Output:	-17 Vdc ±10%; ac ripple < 0.05 V (peak-to-peak)
	-115 Vdc ±13%; ac ripple < 15.0 V (peak-to-peak)
Power Input:	117 Vac ±10%, 50 to 60 Hz
Fusing:	Bus type AGX, 1/4 ampere
Size:	4 3/8 by 15/16 by 4 1/8 inches
Weight:	9 ounces

PARTS LIST

ATLANTIC RESEARCH CORPORATION

TELEPRODUCTS DIVISION ALEXANDRIA, VIRGINIA

PARTS LIST NO. 493

SHEET 1 OF 2 SHEETS

		DATE
APPROVED		
P E	[illegible]	6-17-65
Q.C.	[illegible]	6-18-65
CHECKED	[illegible]	6-17-65
PREPARED	[illegible]	6-17-65

SUBJECT: POWER SUPPLY
RS-2B-1

UNLESS OTHERWISE SPECIFIED ALL REFERENCES TO COMMERCIAL TYPES, STYLES, TRADE NAMES, AND CATALOGS ARE INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE AND ONLY TO INDICATE THE CHARACTERISTICS OF SATISFACTORY ARTICLES.

LTR.	REVISION DESCRIPTION	DATE	APPD.	LTR.	REVISION DESCRIPTION	DATE	APPD.

RECORD OF REVISION STATUS OF EACH SHEET

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

DWG. NO., PART NO., OR OTHER IDENTIFICATION	GROUP NO. AND QUANTITY 1	2	3	4	5	6	TOTAL PIECES OR QUANTITY	NOMENCLATURE	REF. DESIG.	ITEM NO.
TP-SD-21602493	-						—	Schematic Diagram		1
										2
	1						1	Power Supply Assembly; #2501618, Chatam Electronics		3
		1					1	Printed Circuit Board; #2221517, Chatam Electronics		4
			2				2	Eyelet, Brass, N/P; .130 Dia x .158 Lg.; #4419, Stimpson Co., Inc.		5
		1					1	Capacitor, Electrolytic; 10 mfd, 150 WVDC, -10%, +75%; #TE-1507, Sprague Electric Co.	C1	6
32070		1					1	Capacitor, Electrolytic; 10 mfd, 25 WVDC, -10%, +75%; #TE-1204, Sprague Electric Co.	C2	7
		1					1	Diode, Silicon (Rectifier); #1N1220, Westinghouse Electric Corp.	CR1	8
		1					1	Diode, Zener, 18V, 1 w, #ZJ4118, General Electric Co.	CR2	9
										10
33083		1					1	Fuse, ½ Amp, 250V; Type AGC, Bussmann Manufacturing Division	F1	11
										12
33215		1					1	Socket, 3 Pin, #201-AL-03-L48; Cinch Manufacturing Co.	J1	13
33802		1					1	Power Cord, 18 AWG-3 Conductors, Gray, 7 Ft. Lg.; #M10771, Phalo Plastics Corp.	P1	14
			1				1	Terminal Lug, Solderless; #MS25036-48; (Burndy #YAE 18-N17)		15
		2					2	Fuse Clip, Spring Bronze; #4548, Bussmann Manufacturing Division	XF1	16
3077.2		1					1	Resistor, Fixed, Comp.; 10K, ½ w, ±10%; Type GBT, International Resistance Corp.	R1	17
		1					1	Resistor, Fixed, Comp.; 330 ohms, ½ w, ±10%; Type GBT, IRC.	R2	18
		1					1	Transformer; #2001659, Chatham Electronics	T1	19
		1					1	Shell, Plastic; #2231721, Chatham Electronics		20
		1					1	Box, Cardboard; #2231719, Chatham Electronics		21
										22
										23

#Pieces marked as such appear more than once. PIECE TOTAL AMOUNT IS SHOWN ON FIRST LISTING.

PARTS LIST

ATLANTIC RESEARCH CORPORATION

TELEPRODUCTS DIVISION ALEXANDRIA, VIRGINIA

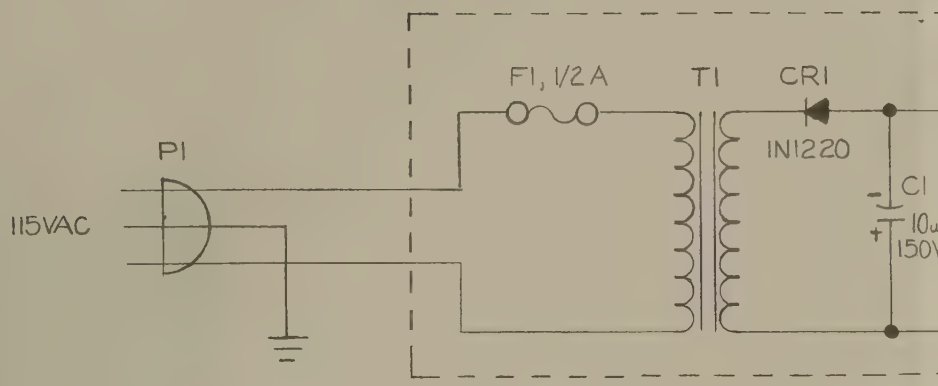
PARTS LIST NO. 493		
SHEET 2 OF 2 SHEETS		
APPROVED		DATE
[signature]	L.W.	6-17-65
CHECKED	[signature]	6-17-65
PREPARED	[signature]	6-17-65

SUBJECT: POWER SUPPLY PS-2B-1

UNLESS OTHERWISE SPECIFIED ALL REFERENCES TO COMMERCIAL TYPES, STYLES, TRADE NAMES, AND CATALOGS ARE INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE AND ONLY TO INDICATE THE CHARACTERISTICS OF SATISFACTORY ARTICLES.

DWG. NO., PART NO., OR OTHER IDENTIFICATION	GROUP NO. AND QUANTITY 1	2	3	4	5	6	TOTAL PIECES OR QUANTITY	NOMENCLATURE	REF. DESIG.	ITEM NO.
								BULK MATERIALS, ETC.		
							As Req'd	Solder, Alloy, 38/61.5%, 35.5%; #[illegible], Kester Solder Company		24
							As Req'd	Wire, Copper, Solid, Tinned, #20 AWG, Nominal O. D. .033; #297, Alpha Wire Corp.		25
							As Req'd	Scotchcast Resin; #603, Minnesota Mining and Manufacturing Company		26

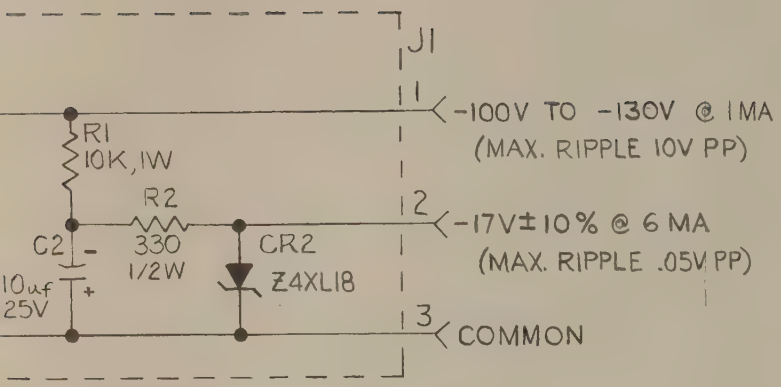
#Pieces marked as such appear more than once. PIECE TOTAL AMOUNT IS SHOWN ON FIRST LISTING.



UNLESS OTHERWISE SPE
DIMENSIONS ARE IN INCH
TOLERANCES:
ANGLES ± —
FRACTIONS ± —
2 PLACE DECIMALS ± —
3 PLACE DECIMALS ± —
SURFACE ROUGHNESS
DO NOT SCALE DRAW
MATERIAL:

DASH NO.	NEXT ASSEMBLY	PROJECT
APPLICATION		

REVISIONS					
SYM	DESCRIPTION	DATE	BY	CHK	APPD



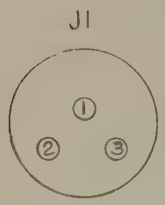


FIG. 1

APPROVAL	BY	DATE
DRAWN	W. SEARS	6/11/65
CHECKED	J. PETRO	6-17-65
ENGRG		
PROJ ENGRG	[illegible]	6-17-65
STRESS		
Q. C.	[illegible]	6-18-65

APPROVED FOR ATLANTIC RESEARCH

NAME _____ DATE _____ 19__

APPROVED

NAME _____ DATE _____ 19__

ATLANTIC RESEARCH CORPORATION
TELEPRODUCTS DIVISION
ALEXANDRIA, VIRGINIA

SCHEMATIC DIAGRAM

POWER SUPPLY
PS-2B-1

CODE IDENT NO.	SIZE		REV
95335	B	LTP-SD-21602493	— LTR
SCALE ——			SHEET ——

WARRANTY

The Power Supply PS-2-1 carries a warranty for five (5) years. The warranty provides for all labor and materials required to repair a defective unit the first year after the date of delivery. During the next four (4) years, all defective materials will be replaced by Atlantic Research. The customer will pay a minimum fee for replacement. All warranty repairs, except for certain fixed installations, will normally be made at our plant located in Alexandria, Virginia.

THE WARRANTY IS VOID WHEN A UNIT HAS BEEN SUBJECTED TO ABUSE, NEGLECT, ALTERATION, OR IMPROPER INSTALLATION.

Fixed Installation. Teleproducts Field Engineering is available to care for problems which may arise from the operation of Teleproducts equipment. If these problems exist in the Teleproducts equipment, the above warranty prevails. If the problems are due to other equipment working into the Teleproducts equipment, a minimum charge will be made.